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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,886	08/24/2001	Mukesh K. Patel	032481-034	3543

8791 7590 07/13/2005

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EXAMINER

DAS, CHAMELI

ART UNIT PAPER NUMBER

2192

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,886

Applicant(s)

PATEL ET AL.

Examiner

CHAMELI C. DAS

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 506-557, 559-607 and 609-615 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 551-557 and 592 is/are allowed.  
6) ☒ Claim(s) 506-550, 559-591, 593-607 and 609-615 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/9/05 and 6/17/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

1. This action is in response to the amendment filed on 3/17/05.
2. IDS filed on 5/9/05 and 6/17/05 have been considered.
3. Claims 506-557, 559- 607, 609-615 are pending.
4. Claims 551-557, 592 have been allowed.
5. Claims 506- 550, 559-591, 593-607 and 609-615 have been rejected.

***Response to the Arguments***

6. Applicant's argument filed on 3/17/05 has been fully considered but they are not persuasive. In remarks, the applicant argues in substance:

(1) Tremblay (US6,125,439) does not teach a hardware processor that is capable of executing instructions of a plurality of instructions sets.

(1) Tremblay teaches a hardware processor that is capable of executing instructions of a plurality of instructions sets. In abstract Tremblay teaches executing instructions of a plurality of instructions sets. Tremblay teaches two sets of instruction set, one from stack-based instruction (col 3, lines 40-65) and other sets are from register based (col 17 lines 10-60), where any instructions which are executed based on registers are register-based instruction, here all the stack cache instructions (col 17 lines 11-22), ALU instructions (col 17 lines 31-39) are all register based instructions which are executed by the processor.

(2) Nowhere does Tremblay state that the hardware processor is capable of executing instructions of a register-based instruction set.

Response:

Art Unit: 2192

(2) Examiner believes that Tremblay teaches the hardware processor is capable of executing instructions of a register-based instruction set. (col 17 lines 10-60), where all the instructions like stack-cache instructions, ALU instructions are register-based instruction. Examiner believes that the operations or instructions which are performed by the registers , are all register-based instructions which are executed in the hardware processors.

(3) As per claim 543, Tremblay does not disclose execution of the register-based instruction, and a common program counter.

Response:

(3) Tremblay teaches execution of the register-based instruction, see the response of argument (1) and (2) above. Tremblay teaches the common program counter in col 10 lines 4-15.

(4) As per claim 540, Tremblay does not teach switching a processing system to an accelerator mode, wherein stack-based instructions are executed directly in hardware, and other limitations of claim 540 are not taught by Tremblay.

Response:

(4) Examiner believes that Tremblay teaches all the limitations in claim 540. See the previous office action and the response of the argument above.

***For all other claims, see the rejection of previous office action.***

***Conclusion***

**7. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**8.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chameli Das whose telephone number is 703-305-1339.

The examiner can normally be reached on Monday-Friday from 7:00 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Tuan Dam can be reached at 703-305-4552. The fax number for this group is (703) 872-9306.

After October 25, 2004, the examiner can be reached at new telephone number

Art Unit: 2192

(571) 272-3696, and the examiner's supervisor Tuan Dam can be reached at (571) 272-3695.

An inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 571-272-2100.

*Chameli C. Das*  
**CHAMELI C. DAS**  
**PRIMARY EXAMINER**  
7/14/05